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In re PATENT APPLICATION of
Inventor(s) KRONGAUZ et al. Group Art Unit: 1711
Appl. No. 08/961,084 Examiner: S. Berman
series code ↑ ↑ serial no.
Filed: October 30, 1997 Atty. Dkt. PMS 240606
M#

TITLE: DIELECTRIC, RADIATION CURABLE Date: May 18, 1999
COATING COMPOSITIONS...

Name or type of signed paper being transmitted: RESUBMISSION OF CLAIMS 17-23,
AS FILED

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21028 / 240606

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PAT-286 11/97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: KRONGAUZ et al.

Serial No.: 08/961,084

Art Unit: 1711

Filed: October 30, 1997

Examiner: Susan Berman

Title: DIELECTRIC, RADIATION CURABLE COATING COMPOSITIONS
AND METAL CONDUCTORS COATED WITH SUCH COATING

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May 18, 1999

RESUBMISSION OF CLAIMS 17-23, AS FILED

Hon. Commissioner of Patents
and Trademarks
Washington, DC 20231

Sir:

In response to the request from Examiner Berman, attached hereto are pages 33 and 34 of the application, as filed, containing claims 17-23. These pages are true copies of the pages, as filed. No new matter is thereby introduced.

An early office Action on the merits is respectfully requested.

Respectfully submitted,

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e) about 0.2 wt.% to about 2 wt.% of a pigment.

17. A metal conductor according to claim 1, wherein said hydrocarbon backbone is fully saturated.

18. A radiation-curable coating composition comprising:

- a) an acrylate functional urethane oligomer having a hydrocarbon backbone;
- b) one or more mono- or polyfunctional diluents; and optionally
- c) one or more light sensitive radical generating compounds;

which coating when cured with radiation has a dielectric dissipation factor at 60 Hz at 24°C of lower than about 0.05, a dissipation factor at 60 Hz at 150°C of lower than about 0.2, and an elongation at 25°C of a 25 μ m thin cured coating of at least about 50%.

19. A radiation-curable coating composition according to claim 18, wherein said hydrocarbon backbone is fully saturated.

20. A radiation-curable coating according to claim 16, wherein the urethane oligomer is the reaction product of a hydrocarbon polyol, a polyisocyanate and an hydroxyfunctional endcapping monomer.

21. A radiation-curable coating composition according to claim 20, wherein said polyisocynate is an aliphatic polyisocyanate.
22. A metal conductor according to claim 8, wherein said one or more monomers is a mono- or polyfunctional alkylacrylate or methacrylate based monomer.
23. A method of making a metal conductor with a cured coating of about 2.5 μm to about 500 μm thickness, which cured coating has a dielectric dissipation factor (60Hz, 24°C) of lower than about 0.05 comprising the steps of:
- a) providing a metal conductor;
 - b) coating said metal conductor with a radiation-curable coating composition which comprises:
 - i) an acrylate functional urethane oligomer having a hydrocarbon backbone;
 - ii) at least one mono- or polyfunctional diluent; and optionally
 - iii) a photoinitiator.